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(54) Title: **COMPOSITIONS COMPRISING CYCLODEXTRIN DERIVATIVES**

(57) Abstract: A stable composition for removing unwanted molecules from a surface comprises low-degree of substitution cyclodextrin derivatives. The compositions are suitable for capturing unwanted molecules from inanimate surfaces, including fabrics, including carpets, and household surfaces such as countertops, dishes, floors, garbage cans, ceilings, walls, carpet padding, air filters, and the like, and from animate surfaces, including skin, hair, and the like. The compositions can further comprise cyclodextrin-compatible and -incompatible materials, and other optional ingredients.

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INT' NATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C08B37/16 A61L9/01 C11D3/22 D06M15/03 C08L5/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 678 598 A (HIDEKAZU OGINO ET AL.) 7 July 1987 (1987-07-07) column 5, line 35 -column 6, line 64 table 2	1-16
X	PATENT ABSTRACTS OF JAPAN vol. 16, no. 110 (C-920), 18 March 1992 (1992-03-18) & JP 03 284616 A (SHISEIDO CO LTD), 16 December 1991 (1991-12-16) abstract	1-11
Y	US 5 942 217 A (RICKY AH-MAN WOO ET AL.) 24 August 1999 (1999-08-24) cited in the application see the whole document	1-11
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International Application No
PCT/US 01/15202

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4 727 064 A (JOSEF PITHA) 23 February 1988 (1988-02-23) column 7, line 14 - line 20 -----	1-11
Y	US 4 638 058 A (LOTHAR BRANDT ET AL.) 20 January 1987 (1987-01-20) column 5, line 16 -column 6, line 3 -----	1-11
Y	EP 0 636 634 A (JANSSEN PHARMACEUTICA N.V.) 1 February 1995 (1995-02-01) page 2, line 51 - line 57 -----	1-11

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/15202

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4678598	A	07-07-1987	JP 1815954 C JP 5029002 B JP 62033112 A AT 61934 T DE 3678356 D1 EP 0211392 A2 ES 2000387 A6 JP 1703226 C JP 3024443 B JP 62149611 A	18-01-1994 28-04-1993 13-02-1987 15-04-1991 02-05-1991 25-02-1987 16-02-1988 14-10-1992 03-04-1991 03-07-1987
JP 03284616	A	16-12-1991	JP 2857629 B2	17-02-1999
US 5942217	A	24-08-1999	AU 1711099 A AU 1711199 A AU 1804699 A BR 9815835 A BR 9815836 A BR 9815837 A EP 0988064 A1 EP 0988364 A1 EP 0988365 A1 TR 200003126 T2 WO 9856888 A1 WO 9856429 A1 WO 9856890 A1 WO 9955813 A1 WO 9955814 A1 WO 9955815 A1 AU 7961098 A BR 9810426 A CN 1269819 T EP 1124923 A1 HU 0100360 A2 TR 200000439 T2 US 6001343 A WO 9856889 A1	16-11-1999 16-11-1999 16-11-1999 26-12-2000 26-12-2000 26-12-2000 29-03-2000 29-03-2000 29-03-2000 22-01-2001 17-12-1998 17-12-1998 17-12-1998 04-11-1999 04-11-1999 04-11-1999 30-12-1998 05-09-2000 11-10-2000 22-08-2001 30-07-2001 21-11-2000 14-12-1999 17-12-1998
US 4727064	A	23-02-1988	US 4596795 A	24-06-1986
US 4638058	A	20-01-1987	DE 3477929 D1 EP 0147685 A2 JP 1890069 C JP 6017361 B JP 60152502 A	01-06-1989 10-07-1985 07-12-1994 09-03-1994 10-08-1985
EP 636634	A	01-02-1995	EP 0636634 A1 AT 124055 T AT 159954 T AU 583599 B2 AU 5476086 A CA 1300130 A1 CY 1918 A DE 3650336 D1 DE 3650655 D1 DE 3650655 T2 DK 121486 A EP 0197571 A2	01-02-1995 15-07-1995 15-11-1997 04-05-1989 16-10-1986 05-05-1992 07-03-1997 27-07-1995 11-12-1997 12-03-1998 16-09-1986 15-10-1986

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/15202

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 636634	A	ES 552984 D0	16-05-1987
		ES 8705899 A1	01-08-1987
		FI 861064 A ,B,	16-09-1986
		FI 86507 B	29-05-1992
		GR 860685 A1	11-07-1986
		HK 131896 A	26-07-1996
		HU 42514 A2	28-07-1987
		HU 206381 B	28-10-1992
		IE 66673 B1	24-01-1996
		IE 80908 B1	16-06-1999
		IE 950700 L	15-09-1986
		JP 2562809 B2	11-12-1996
		JP 61275301 A	05-12-1986
		KR 9307386 B1	09-08-1993
		NO 860971 A ,B,	16-09-1986
		NZ 215350 A	29-03-1989
		PT 82186 A ,B	01-04-1986
		SG 48788 A1	18-05-1998
		US 4870060 A	26-09-1989
		US 4764604 A	16-08-1988
		ZA 8601930 A	28-10-1987